

WHAT IS CLAIMED IS:

- 1 1. A GPRS telecommunications system, comprising:
2 a Serving GPRS support node (SGSN) including a mapping module and
3 adapted to interface to a mobile station; and
4 a gateway GPRS support node (GGSN) including a port assignment module
5 and adapted to couple to a packet network;
6 wherein said port assignment module is adapted to sequentially assign a
7 plurality of IP addresses to same TCP ports and said mapping module is adapted to
8 maintain a mapping between a particular port, an IP address, and a mobile station
9 during a connection between said mobile station and said packet network.
- 1 2. A telecommunications system in accordance with claim 1, wherein said IP
2 addresses are assigned to said ports responsive to a PDP activation request.
- 1 3. A telecommunications system in accordance with claim 2, wherein said
2 SGSN receives a port identification and an IP address responsive to a Create PDP
3 context request.
- 1 4. A telecommunications system in accordance with claim 3, wherein said
2 SGSN sends the received IP address to a mobile station in a PDP Context
3 Activation Response.
- 1 5. A GPRS telecommunications system, comprising:
2 a Serving GPRS support node (SGSN) adapted to interface to a plurality of
3 mobile stations;
4 a gateway GPRS support node (GGSN) adapted to couple to a packet
5 network; and
6 means for assigning an IP address to a plurality of TCP ports such that a
7 plurality of said mobile stations can simultaneously communicate with said packet
8 network using said IP address over different ones of said TCP ports.

1 6. A GPRS telecommunications system in accordance with claim 5, said
2 assigning means comprising means for assigning said IP addresses to said ports
3 responsive to a PDP activation request.

1 7. A GPRS telecommunications system in accordance with claim 6, wherein
2 said SGSN receives a port identification and an IP address responsive to a Create
3 PDP context request.

1 8. A GPRS telecommunications system in accordance with claim 7, wherein
2 said SGSN sends the received IP address to a mobile station in a PDP Context
3 Activation Response.

1 9. A telecommunications method, comprising:
2 assigning multiple IP addresses to a same port in a GGSN; and
3 transmitting packets from multiple mobile stations via said port.

1 10. A telecommunications method in accordance with claim 9, said assigning
2 comprising assigning said IP addresses to said ports responsive to a PDP activation
3 request.

1 11. A method in accordance with claim 10, further comprising: a SGSN
2 receiving a port identification and an IP address responsive to a Create PDP context
3 request.

1 12. A method in accordance with claim 11, further comprising said SGSN
2 sending the received IP address to a mobile station in a PDP Context Activation
3 Response

1 13. A method, comprising:
2 providing a Serving GPRS support node (SGSN) including a mapping module
3 and adapted to interface to a mobile station; and

4 providing a gateway GPRS support node (GGSN) including a port assignment
5 module and adapted to couple to a packet network;

6 wherein said port assignment module is adapted to sequentially assign a
7 plurality of IP addresses to same TCP ports and said mapping module is adapted to
8 maintain a mapping between a particular port, an IP address, and a mobile station
9 during a connection between said mobile station and said packet network.

1 14. A method in accordance with claim 13, wherein said IP addresses are
2 assigned to said ports responsive to a PDP activation request.

1 15. A method in accordance with claim 14, wherein said SGSN receives a
2 port identification and an IP address responsive to a Create PDP context request.

1 16. A method in accordance with claim 15, wherein said SGSN sends the
2 received IP address to a mobile station in a PDP Context Activation Response.